

CLAIMS

What is claimed is:

- 5 1. A keratinocyte growth factor-2 (KGF-2) protein consisting of:
 - (a) residues 69 through 208 of the amino acid sequence set forth in SEQ ID NO: 2; or
 - (b) residues 69 through 208 of the amino sequence
10 set forth in SEQ ID NO: 2 and an N-terminal methionine.
2. The KGF-2 protein of Claim 1, wherein the amino acid sequence is nonglycosylated.
- 15 3. The KGF-2 protein of Claim 1, wherein the amino acid sequence is glycosylated.
4. A chemical derivative comprising a water-soluble polymer conjugated to the KGF-2 protein of
20 Claim 1.
5. A polynucleotide encoding the KGF-2 protein of Claim 1.
- 25 6. A vector comprising a polynucleotide of Claim 5, operatively linked to an expression control sequence
7. A prokaryotic or eukaryotic host cell comprising the polynucleotide of Claim 5.
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8. A method comprising culturing the host cell of Claim 7 in a suitable nutrient medium.

9. The method of Claim 8, wherein the host cell is an *E. coli* cell.

10. The method of Claim 8, wherein the host cell is a baculovirus cell, COS cell, or Chinese hamster ovary cell.

11. A method comprising isolating a keratinocyte growth factor-2 (KGF-2) protein from a host cell comprising the polynucleotide of Claim 5, cultured under conditions allowing the expression of the KGF-2 protein by the host cell.

12. The method of Claim 11, further comprising modifying the isolated KGF-2 protein to generate a compound capable of stimulating the production of epithelial cells.

13. A method comprising:

- (a) culturing a prokaryotic or eukaryotic host cell comprising the polynucleotide of Claim 5; and
(b) maintaining the host cell under conditions allowing the expression of a keratinocyte growth factor-2 (KGF-2) protein by the host cell.

14. The method of Claim 13, further comprising after step (b) the following step (c):

(c) isolating the KGF-2 protein expressed by the host cell.

15. A pharmaceutical composition comprising a keratinocyte growth factor-2 (KGF-2) protein isolated

in accordance with the method of Claim 14, in association with a pharmaceutically acceptable vehicle.

16. The KGF-2 protein of Claim 1 that is the
5 recombinant expression product of a prokaryotic or eukaryotic host cell comprising an exogenous polynucleotide of Claim 5.

17. A pharmaceutical composition comprising the
10 KGF-2 protein of Claim 1 in association with a pharmaceutically acceptable vehicle.

18. The method of Claims 8, 9, or 10, further comprising isolating a keratinocyte growth factor-2
15 (KGF-2) protein from the cultured cells or nutrient medium.

19. A pharmaceutical composition comprising a keratinocyte growth factor-2 (KGF-2) protein isolated
20 in accordance with the method of Claim 18, in association with a pharmaceutically acceptable vehicle.

20. The KGF-2 protein of Claim 1, wherein at least one domain of the constant region of the heavy
25 chain of human immunoglobulin is fused to the C-terminal end of the KGF-2 protein.